CLAIMS:

1. A method for operating a multi-station network for therein effecting node-to-node communications over a serial bus in a collision-free fashion, whilst having before starting such communication a communication originator station execute a gap_count procedure for measuring an ***idle*** interval, said method being characterized by the steps of:

measuring various path delay values between a first node and a second node;

selecting a worst case among said path delay values;

assigning a gap_count to said worst case delay value.

2. A method as claimed in Claim 1, wherein said path delay values each include an interval for returning an acknowledge packet.

3. A method as claimed in Claim 1, wherein said measuring is effected by a single root node.

4. A method as claimed in Claim 1, wherein said second node is limited to being a leaf node, and using all available leaf nodes as said second node.

5. A method as claimed in Claim 1, wherein said measuring is effected by a single root node by measuring round trip delay values to all available leaf nodes.

6. A method as claimed in Claim 5, wherein the two highest recorded round trip delay values are summed for therefrom determining an overall gap_count indication.

7. A multi-station system arranged for implementing a method as claimed in Claim 1 and comprising a serial bus network for thereon in a collision-free fashion effecting node-to-node communications, furthermore comprising in a communication originator station gap_count setting means for executing a gap_count procedure for measuring an ***idle*** interval on said bus before starting such communication, said system furthermore being characterized by comprising

measuring means for measuring various path delay values between a first node and a second node;

selection means for selecting a worst case among said measured path delay values;

and assigning means for assigning a gap_count to said worst case delay value.

8. An apparatus being arranged for operating as a measuring node in a system as claimed in Claim 7.